# LR802UWG USB Wireless Adapter User Manual

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# **Revision History**

Revision	Updated	Notes
1.00	08/15/2005	Initial Release
1.01	08/16/2005	Modify the LED status

## Introduction

Thank you for purchasing the <u>Wireless Adapter</u>. This Wireless Adapter is easy to use and easy to setup. If you are tired of all those messy wires needed to connect a lap-top to your Home network, then take your networking to the next level with the Wireless Adapter. You will be able to share files, printers and even your High-Speed Internet access wirelessly.

## **Package Contents**

Make sure the following items came in this package:

- Wireless Adapter
- Wireless Adapter Installation and User's Manual CD

## **Minimum System Requirements**

 Microsoft Windows 98 Second Edition (SE), Windows ME, Windows XP, or Windows 2000 installed

# **Connecting the Wireless Adapter**

- 1. Your computer can be on or off; it will not affect the installation process. Locate an available USB slot on your PC. If you are not sure where this may be, please consult your computer's User Manual.
- 2. Insert the Wireless Adapter into the appropriate USB slot. Your hardware is now installed.



# **Status LEDs**

LED Status	MEANING WLAN card activity		
LED1 on (Green)	Connect with Access Point		
LED1 off	All other status		
LED2 speed blink (Orange)	Data Transferred / Data Received		
LED2 blink (Orange)	Scanning for the Access Point		
LED2 off	All other status		

# Installing the Wireless Adapter

## Windows XP:

**Note**: If you have installed the Wireless Adapter driver before, please uninstall the old version first.

1. After you have installed the Wireless Adapter your computer will display a **Found New Hardware Wizard** screen, click **Cancel** to continue.



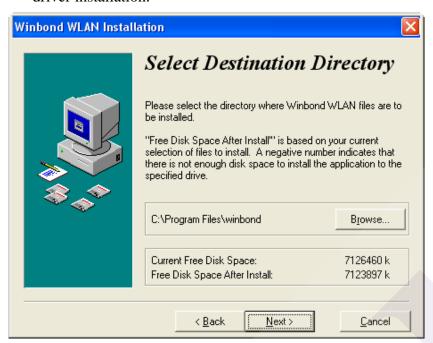
2. Insert *Wireless Adapter Installation and User's Manual* CD into your CD-ROM, then the installation will be activated automatically. Click the *Driver Install* icon to begin the installation.



3. **Winbond Wireless Setup** will install the driver and utility on your system, click *Next* to continue.



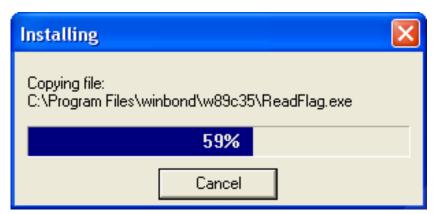
4. On the *Select Destination Directory* screen, click *Next* to accept the Destination Directory for driver installation.



5. Press the *Next* button to begin the installation.



6. Wireless Adapter Driver and Utility are installing.



7. The installation is now complete, please click Finish.



Note: When you complete the installation, the utility icon will appear on the system tray. If not, it means that the installation failed. Please uninstall the driver and repeat the process.

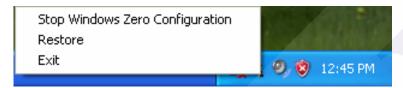
## **Configuring the Winbond Wireless Utility**

**Note**: If you have installed the **Windows XP Service Pack 2**. You can use the Windows Zero Configuration for Wireless Configuring. Please see the **Windows XP User Guide**.

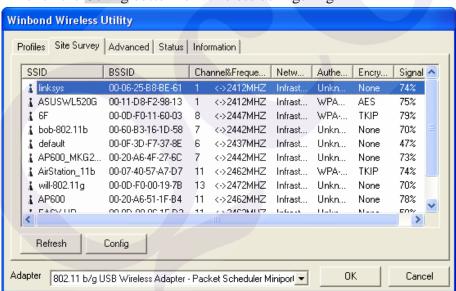
1. On the *Notification Area*, right-click the **Winbond Utility** icon.



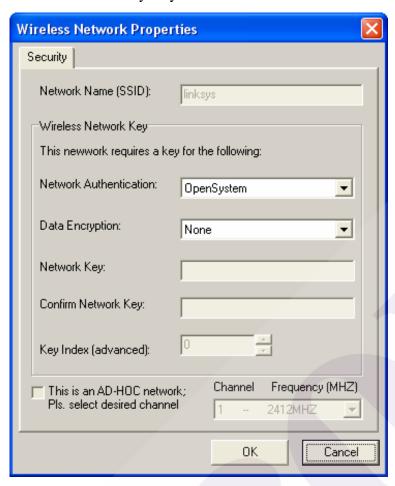
2. Winbond Utility Selection screen will be displayed, click Stop Windows Zero Configuration.



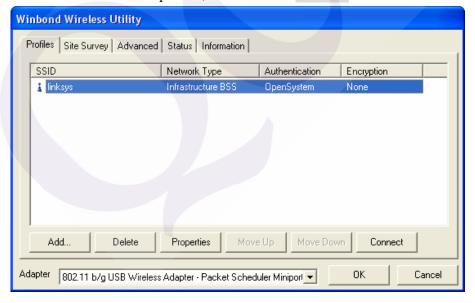
3. Double-click the utility icon in your system tray to begin the utility configuration. Select **Site Survey Tab**, all available Access Points would be listed. Click on the desired Access Point, and click the Config button for Wireless configuring.



4. On the **Wireless Network Properties** screen, you may set Network Name (SSID), Wireless Network Security Key or AD-HOC network.



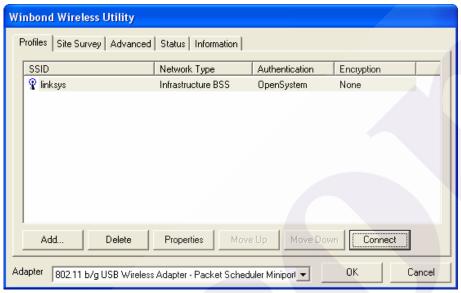
5. Click on the desired profile, and click the Connect button to take effect.



# Configuration

#### Profile

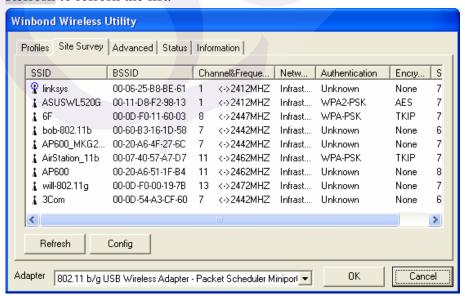
The **Profile Tab** allows you to set values for all parameters by selecting a previously defined profile. To create a profile, click Add, type a profile name and set the corresponding parameters. If one of the profiles is no longer used, you may remove it by clicking the Delete button. After changing parameters, click the Connect button to take effect. You can have multiple profiles and modify the profile at any time.



#### Site Survey

**Site Survey Tab** lists the features of the available Access Points within range of the Wireless Adapter's signal.

Click on the desired Access Point, and click Config for Wireless Configuration. You may click Refresh to refresh the list.



#### Status

#### **Network Name**

The field shows the association status to available Access Point with SSID of the Access Point.

#### **Link Status**

Shows the whether the link is Connect or Disconnected.

#### **Current Channel**

Shows the channel on which the connection is made.

## **Current Speed**

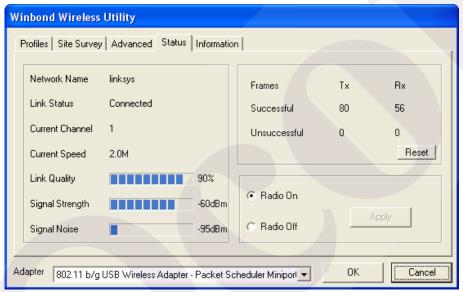
Shows the highest transmit rate of the current association.

## Link Quality / Signal Strength

The Link Quality and Signal Strength bar graph is only active when the node is in Infrastructure Mode. The bar graph displays the quality and strength of the link between the node and its Access Point.

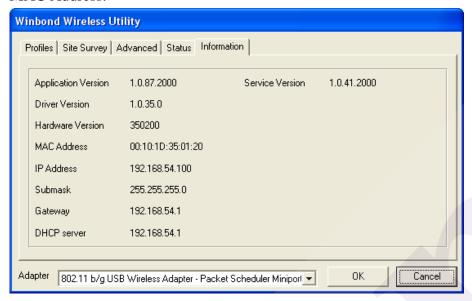
## **Singnal Noise**

This displays the noise level of the link between the node and its Access Point.



## Information

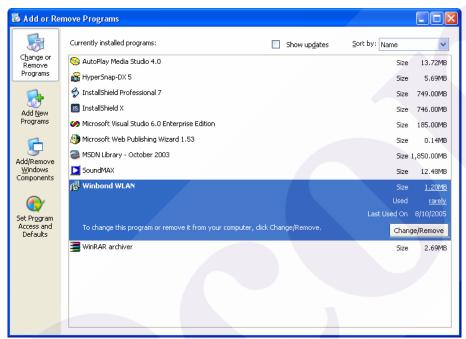
About Tab shows the product version including the detail of Configuration Utility, Driver, and NIC MAC Address.



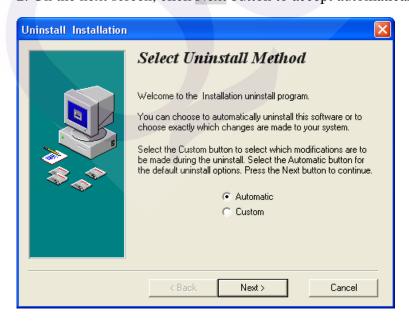
# **Uninstalling the Wireless Adapter Driver and Utility**

1. For uninstalling the Wireless Adapter, please go to:**Start->Settings->Control Panel->Add or Remove Programs->Winbond WLAN** under Windows environment. Then click Remove.





2. On the next screen, click Next button to accept automatically uninstall for Wireless LAN Driver.



## 3. Click Finish button.





4. The *USB Wireless Adapter* can now be safely removed from the system when the un-installation is done.

## Windows 2000:

1. After you have installed the Wireless Adapter your computer will display a **Found New Hardware Wizard** screen, click Cancel to continue.



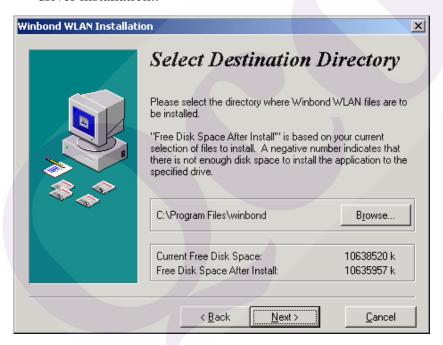
2. Insert *Wireless Adapter Installation and User's Manual CD* into your CD-ROM; then the installation will be activated automatically. Click the *Driver Install* icon to begin the installation.



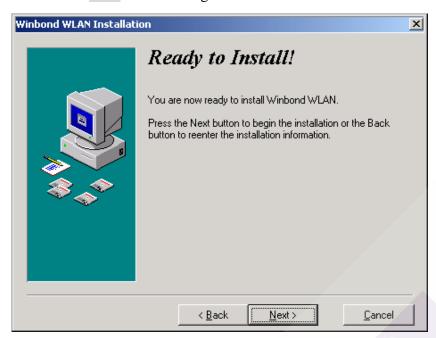
3. Winbond Wireless Setup will install the driver and utility on your system, click Next to continue.



4. On the *Select Destination Directory* screen, click *Next* to accept the Destination Directory for driver installation..



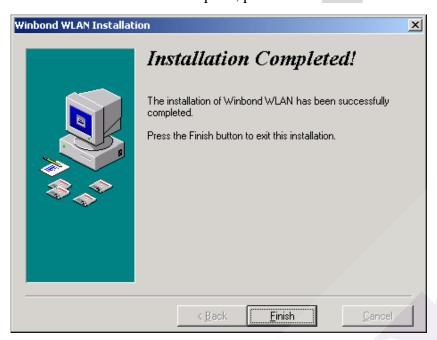
5. Press the *Next* button to begin the installation.



6. Wireless Adapter Driver and Utility are installing.



7. The installation is now complete, please click Finish.

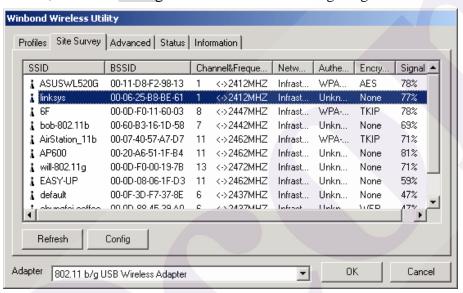


# **Configuring the Winbond Wireless Utility**

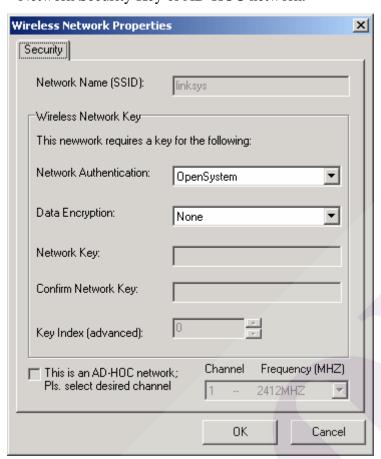
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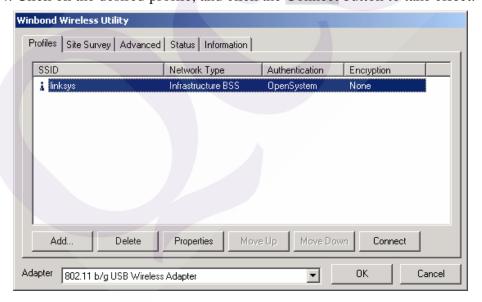
2. Select **Site Survey Tab**, all available Access Points would be listed. Click on the desired Access Point, and click Config button for Wireless configuring.



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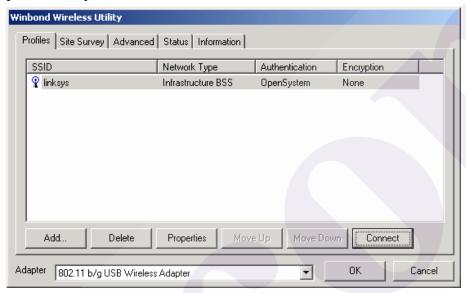
4. Click on the desired profile, and click the Connect button to take effect.



# Configuration

## Profile

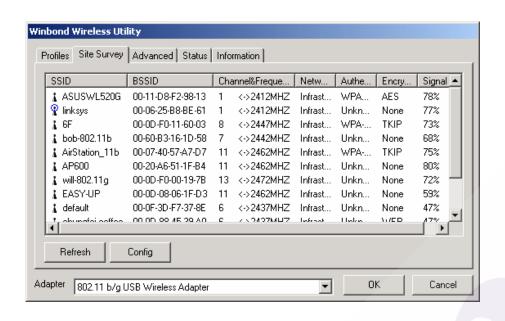
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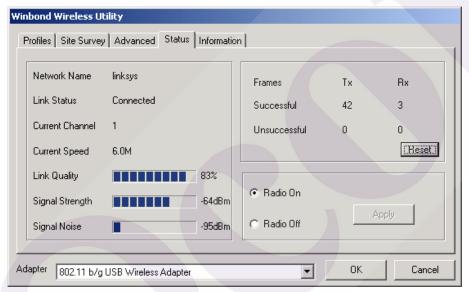
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## **Information**

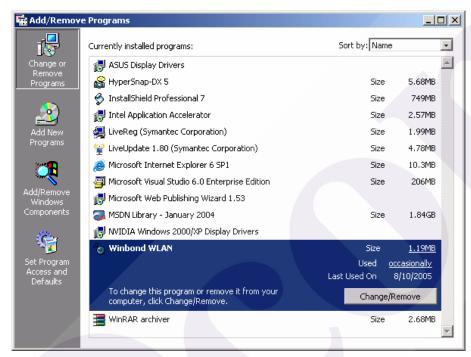
About Tab shows the product version including the detail of Configuration Utility, Driver, and NIC MAC Address.



# **Uninstalling the Wireless Adapter Driver and Utility**

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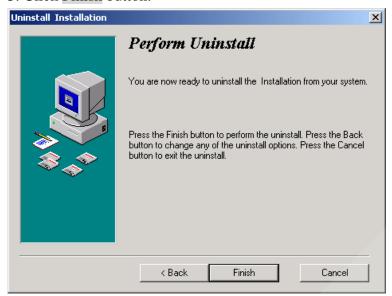




2. On the next screen, click Next button to accept automatically uninstall for Wireless LAN Driver.



3. Click Finish button.





4. The *USB Wireless Adapter* can now be safely removed from the system when the un-installation is done.

# **Trouble shooting**

## **PING**

This section discusses possible solutions using ping command to find your problem if you can't connect to the network.

- 1. Check if you have a valid IP address
- 2. Test if your TCP/IP works. Under MS-DOS (command prompt), type "ping localhost". If you didn't receive a reply, then you need to re-install your TCP/IP. Proceed to next step if you have received replies.
- 3. Using the same procedure, try to ping your Wireless Adapter's IP. If the Ping command fails, check the following:
  - Your WLAN is connected
  - Check that your driver is correctly installed.

## **Checking Valid IP Addresses**

There are restrictions on which IP and addresses you can and cannot use. Some IP addresses are reserved for testing, multicasting and some IP are restricted by your ISP.

Following IP addresses cannot be used:

- ➤ 127.x.x.x this is a loop back address, used for testing
- > 0.0.0.0 this IP address represent the host address
- 255.255.255.255 this is local broadcast address
- First portion of IP cannot exceed 224, that is, IP addresses which is in the range of 224~239.x.x.x is not valid. This range of IP is for multicasting. IP range from 240~255.x.x.x are reserved IP addresses and cannot be used.
- > 0 or 255 in host ID portion of your IP are not valid. This represent local host or broadcast address for your class of IP

IP has five classes, namely class A, B, C, D and E. For each class, the host ID portion in the IP field is different for each of the classes. Figure below illustrate this.

Class A:	1 ~ 127 .	Host ID	
Class B:	128 ~ 191 .	X . Host ID	
Class C:	192 ~ 223 .	X . X . Host	: ID
Class D:	224 ~ 239 .	Used for Multicas	sting (no Host ID)
Class E:	240 ~ 255 .	Reserved IP add	ress

Host ID cannot be all 0's or all 255's.

Note: X denote don't cares in the above example.

## **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## **IMPORTANT NOTE:**

#### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting.

"Qcom declare that LR802UWG is limited in CH1~CH11 by specified firmware controlled in USA."

This device is intended only for OEM integrators under the following conditions:

- 1) The antenna must be installed such that 20 cm is maintained between the antenna and users, and
- 2) The transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 conditions above are met, further <u>transmitter</u> test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

**IMPORTANT NOTE:** In the event that these conditions <u>can not be met</u> (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID <u>can not</u> be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

#### **End Product Labeling**

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users (for example: Notebook, Wireless Router...etc.). The final end product must be labeled in a visible area with the following:

"Contains TX FCC ID: RUJ-LR802UWG".

## **Manual Information That Must be Included**

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the users manual of the end product which integrate this module.

The end users manual for OEM integrators must include the following information in a prominent location "IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.